

AC-D Series

Option / Accessory / Attachment

Part No. List

Section	Model		Part no.						
			For AC20-D	For AC30-D	For AC40-D	For AC40-06-D	For AC50-D	For AC60-D	
			For AC20A-D	For AC30A-D	For AC40A-D	For AC40A-06-D	For AC50A-D	For AC60A-D	
			For AC20B-D	For AC30B-D	For AC40B-D	For AC40B-06-D	For AC50B-D	For AC60B-D	
			For AC20C-D	For AC30C-D	For AC40C-D	For AC40C-06-D	—	—	
Description			For AC20D-D	For AC30D-D	For AC40D-D	For AC40D-06-D	—	—	
Option	*1 Pressure gauge	Round type	Standard	G36-10-□01		G46-10-□01			
			0.02 to 0.2 MPa setting	G36-4-□01		G46-4-□01			
		Round type (with color zone)	Standard	G36-10-□01-L		G46-10-□01-L			
			0.02 to 0.2 MPa setting	G36-4-□01-L		G46-4-□01-L			
	Digital pressure switch	Square embedded type*2	Standard	GC3-10AS-D [136150A (Pressure gauge cover only)]					
			0.02 to 0.2 MPa setting	GC3-4AS-D [136150A (Pressure gauge cover only)]					
			NPN output, Wiring bottom entry	ISE35-N-25-MLA-X523 [ISE35-N-25-M (Switch body only)]*3					
			NPN output, Wiring top entry	ISE35-R-25-MLA-X523 [ISE35-R-25-M (Switch body only)]*3					
		PNP output, Wiring bottom entry	ISE35-N-65-MLA-X523 [ISE35-N-65-M (Switch body only)]*3						
	PNP output, Wiring top entry		ISE35-R-65-MLA-X523 [ISE35-R-65-M (Switch body only)]*3						
Float type auto drain*4			N.C.	AD27-D	AD37-D	AD47-D			
		N.O.	—	AD38-D	AD48-D				
Accessory	Spacer		p. 48	Y200-D	Y300-D	Y400-D	Y500-D	Y600-D	
	Spacer with bracket		p. 48	Y200T-D	Y300T-D	Y400T-D	Y500T-D	Y600T-D	
Attachment	Pressure relief 3-port valve*5, *6		p. 49	VHS20-□01-D VHS20-□02-D	VHS30-□02-D VHS30-□03-D	VHS40-□02-D VHS40-□03-D VHS40-□04-D	VHS40-□06-D	VHS50-□06-D VHS50-□10-D	—
	Piping adapter*5, *6		p. 50	E200-□01-D E200-□02-D E200-□03-D	E300-□02-D E300-□03-D E300-□04-D	E400-□02-D E400-□03-D E400-□04-D E400-□06-D	E500-□06-D E500-□10-D	E600-□06-D E600-□10-D E600-□12-D E600-□14-D	
	L-shaped piping adapter*5, *6		p. 51	E200L-□01-D E200L-□02-D	E300L-□01-D E300L-□02-D E300L-□03-D	E400L-□02-D E400L-□03-D E400L-□04-D	E500L-□04-D E500L-□06-D	E600L-□04-D E600L-□06-D E600L-□10-D	
	T-shaped piping adapter*5, *6		p. 51-1	E200T-□01-D E200T-□02-D	E300T-□01-D E300T-□02-D E300T-□03-D	E400T-□02-D E400T-□03-D E400T-□04-D	E500T-□04-D E500T-□06-D	E600T-□04-D E600T-□06-D E600T-□10-D	
	T-spacer*5, *6	p. 52	Standard	Y210-□01-D Y210-□02-D	Y310-□01-D Y310-□02-D Y310-□03-D	Y410-□02-D Y410-□03-D Y410-□04-D	Y510-□02-D Y510-□03-D Y510-□04-D Y510-□06-D	Y610-□03-D Y610-□04-D Y610-□06-D	
			Slim type	Y210-□01-1-D Y210-□02-1-D	Y310-□01-1-D Y310-□02-1-D	Y410-□02-1-D Y410-□03-1-D	Y510-□02-1-D Y510-□03-1-D	Y610-□03-1-D Y610-□04-1-D	
	Cross spacer*5, *6	p. 53	Standard	Y24-□01-D Y24-□02-D	Y34-□01-D Y34-□02-D Y34-□03-D	Y44-□02-D Y44-□03-D Y44-□04-D	Y54-□02-D Y54-□03-D Y54-□04-D Y54-□06-D	Y64-□03-D Y64-□04-D Y64-□06-D	
			Front and back port selectable type	Y24-□01-1-D Y24-□02-1-D	Y34-□01-1-D Y34-□02-1-D Y34-□03-1-D	Y44-□02-1-D Y44-□03-1-D Y44-□04-1-D	Y54-□03-1-D Y54-□04-1-D Y54-□06-1-D	—	
	Pressure switch*6	p. 54	Standard	IS10M-20-D	IS10M-30-D	IS10M-40-D	IS10M-50-D	IS10M-60-D	
			Slim type	IS10M-20-1-D	IS10M-30-1-D	IS10M-40-1-D	IS10M-50-1-D	IS10M-60-1-D	
	Pressure switch with T-spacer*5, *6		p. 55	IS10T-20-□01-D IS10T-20-□02-D	IS10T-30-□01-D IS10T-30-□02-D IS10T-30-□03-D	IS10T-40-□02-D IS10T-40-□03-D IS10T-40-□04-D	IS10T-50-□02-D IS10T-50-□03-D IS10T-50-□04-D IS10T-50-□06-D	IS10T-60-□03-D IS10T-60-□04-D IS10T-60-□06-D	
	Pressure switch with L-shaped piping adapter*5, *6		p. 56	IS10L-20-□01-D IS10L-20-□02-D	IS10L-30-□01-D IS10L-30-□02-D IS10L-30-□03-D	IS10L-40-□02-D IS10L-40-□03-D IS10L-40-□04-D	IS10L-50-□04-D IS10L-50-□06-D	IS10L-60-□04-D IS10L-60-□06-D IS10L-60-□10-D	
	Pressure switch with piping adapter*5, *6		p. 57	IS10E-20-□01-D IS10E-20-□02-D IS10E-20-□03-D	IS10E-30-□02-D IS10E-30-□03-D IS10E-30-□04-D	IS10E-40-□02-D IS10E-40-□03-D IS10E-40-□04-D IS10E-40-□06-D	IS10E-50-□06-D IS10E-50-□10-D	IS10E-60-□06-D IS10E-60-□10-D IS10E-60-□12-D IS10E-60-□14-D	

*1 □ in part numbers for a round type pressure gauge indicates a pipe thread type. No indication is necessary for R; however, indicate N for NPT. Please contact SMC regarding the connection thread NPT and pressure gauge supply for psi unit specifications.

*2 Including one O-ring and 2 mounting screws

*3 Lead wire with connector (2 m), adapter, lock pin, O-ring (1 pc.), mounting screws (2 pcs.) are attached. []: Switch body only

Regarding how to order the digital pressure switch, refer to the **Web Catalogue**.

*4 Minimum operating pressure: N.O. type— 0 . 1 MPa; N.C. type— 0 . 1 MPa (AD27-D) and 0.15 MPa (AD37-D/AD47-D). Please contact SMC separately for psi and "F" unit display specifications.

*5 □ in attachment part numbers indicates a pipe thread type. No indication is necessary for Rc thread; however, indicate N for NPT thread, and F for G thread.

*6 Separate spacers are required for modular units.

AC-D Series

Accessories (Spacer / Spacer with Bracket)

Spacer / Spacer with Bracket

Y **300** **□** - D

① ②

	Symbol	Description	①				
			Body size [Applicable AC size]				
			200 [AC20]	300 [AC30]	400 [AC40]	500 [AC40-06]	600 [AC50/AC60]
② Bracket	—	Spacer	●	●	●	●	●
	T	Spacer with bracket	●	●	●	●	●

Spacer
(Y□-D)



Spacer with bracket
(Y□T-D)



Standard Specifications

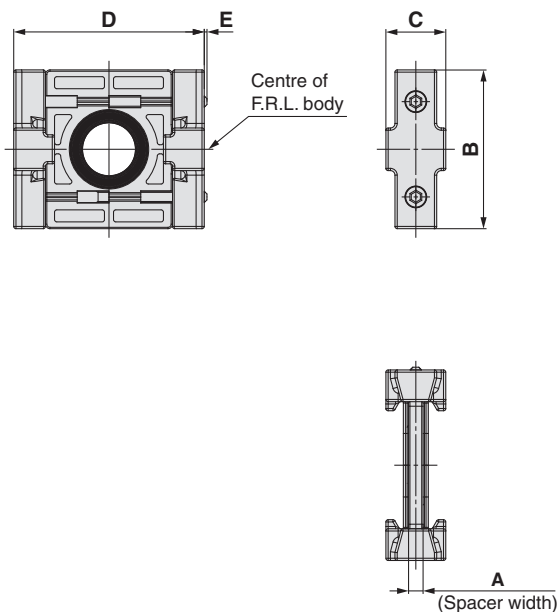
Fluid	Air
Ambient and fluid temperatures	-5 to 60 °C (No freezing)
Proof pressure	1.5 MPa
Max. operating pressure	1.0 MPa

Replacement Parts

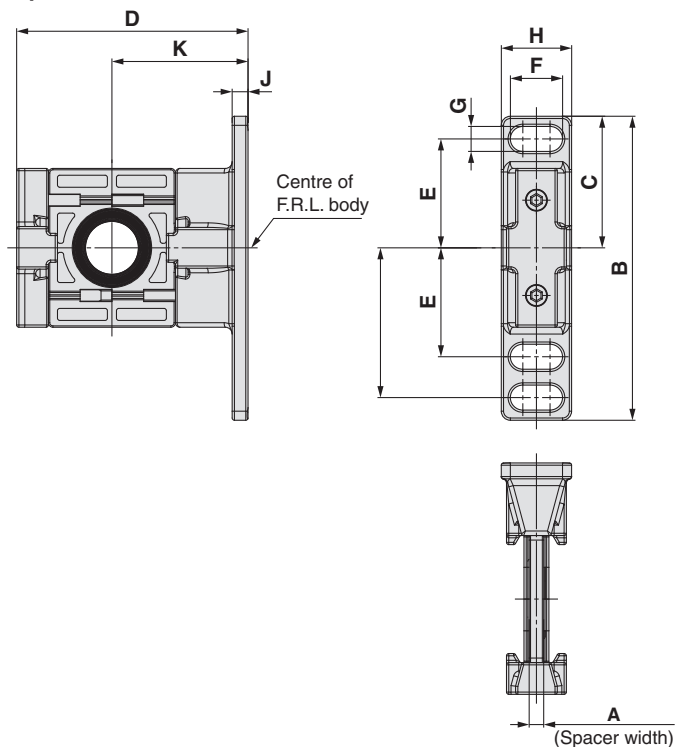
Description	Material	Part no.				
		Y200-D Y200T-D	Y300-D Y300T-D	Y400-D Y400T-D	Y500-D Y500T-D	Y600-D Y600T-D
Seal	HNBR	Y220P-050S	Y320P-050S	Y420P-050S	Y520P-050S	Y620P-050S

Dimensions

Spacer



Spacer with bracket



Model	A	B	C	D	E	Applicable size
Y200-D	3.2	35	13.2	42	0.6	AC20-D
Y300-D	4.2	43	16.2	53	—	AC30-D
Y400-D	5.2	51	19.2	71	—	AC40-D
Y500-D	5.2	54	21.2	71	—	AC40-06-D
Y600-D	6.2	64	27.2	90	—	AC50-D AC60-D

Model	A	B	C	D	E	EE	F	G	H	J	K	Applicable size
Y200T-D	3.2	67	29	51	24	33	11.5	5.5	15.5	3.5	30	AC20-D
Y300T-D	4.2	85	42.5	67.5	35	—	14	7	20	6	41	AC30-D
Y400T-D	5.2	115	50	85.5	40	55	18	9	26	7	50	AC40-D
Y500T-D	5.2	115	50	85.5	40	55	18	9	26	7	50	AC40-06-D
Y600T-D	6.2	140	60	115	50	70	20	11	31.2	8	70	AC50-D AC60-D



AC-D Series Specific Product Precautions

Be sure to read this before handling the products. Refer to the back cover for safety instructions. For F.R.L. units precautions, refer to the “Handling Precautions for SMC Products” and the “Operation Manual” on the SMC website: <https://www.smc.eu>

Air Supply

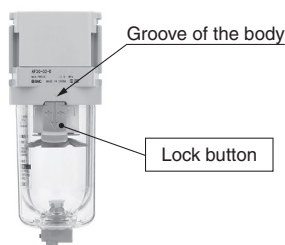
⚠ Caution

1. Use an air filter with 5 µm or less filtration rating on the inlet side of the valve to avoid any damage to the seat caused by dust when mounting a pressure relief 3-port valve on the inlet side.

Mounting / Adjustment

⚠ Caution

1. When the bowl is installed on the air filter, filter regulator, lubricator, mist separator, or micro mist separator (AC30-D to AC60-D), install them so that the lock button lines up to the groove of the front (or the back) of the body to avoid drop or damage of the bowl.

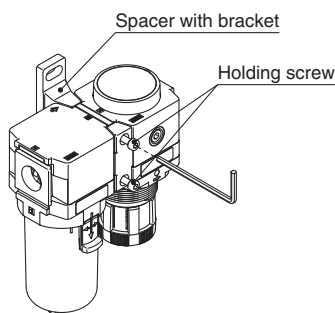


2. Tighten the 2 holding screws on the spacer with bracket or spacer evenly.
Tighten them to the recommended tightening torque.
Insufficient tightening torque may result in loosening or sealing failure. Excessive tightening torque may damage the thread, etc.

Recommended Torque

Unit: N·m

Applicable model	AC20□	AC30□	AC40□	AC40□-06	AC50□ AC60□
Spacer with bracket part no.	Y200T-D	Y300T-D	Y400T-D	Y500T-D	Y600T-D
Spacer part no.	Y200-D	Y300-D	Y400-D	Y500-D	Y600-D
Torque	0.36 ±0.036	1.2 ±0.05	1.2 ±0.05	1.4 ±0.05	2.0 ±0.1



Selection

⚠ Warning

1. Piping load and moment

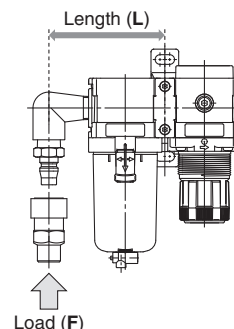
Avoid any torsional or bending moments other than those caused by the equipment's own weight as failure to do so may result in damage. Support external piping separately. If moment application is unavoidable during operation, the moment should be lower than the max. moment shown below.

Piping materials without flexibility, such as steel tube piping, are prone to being affected by excess moment loads or vibrations from the piping side. Use flexible tubing in between to avoid such effects.

Unit: N·m

Applicable model	AC20□	AC30□	AC40□	AC40□-06	AC50□ AC60□
Max. moment (M)	14.5	16	19.5	35	45

Max. moment (M) = Length (L) x Load (F)



2. Float type auto drain

Operate under the following conditions to avoid a malfunction.

<N.O. type>

- Operating compressor: 0.75 kW (100 l/min (ANR)) or more
When using 2 or more auto drains, multiply the value above by the number of auto drains to find the capacity of the compressors you will need.
For example, when using 2 auto drains, 1.5 kW (200 l/min (ANR)) of the compressor capacity is required.

- Operating pressure: 0.1 MPa or more

<N.C. type>

- Operating pressure for AD27-D: 0.1 MPa or more
Operating pressure for AD37-D/AD47-D: 0.15 MPa or more

3. Use a regulator or filter regulator with backflow function when mounting a pressure relief 3-port valve on the inlet side to ensure the release of the residual pressure. Otherwise, residual pressure will not be fully released.

⚠ Caution

1. When releasing air at the intermediate position using a T-spacer on the inlet side of the lubricator, lubricant may backflow. Therefore, releasing air that does not contain traces of lubricant is not possible. To release air that does not contain traces of lubricant, use a check valve (AKM series) on the inlet side of the lubricator to prevent a backflow of the lubricant.
2. If a pressure relief 3-port valve is mounted on the inlet side of the lubricator, causing a backflow of air, it can result in a backflow of oil or damage to internal parts. Do not use it in this manner.
3. An F.R.L. unit shipped from the plant has its model number labeled. However, components that are combined together during the distribution process do not have a label on them.
4. When operating at an inlet pressure lower than the inlet pressure used in the flow rate characteristics graph, the pressure drop on the outlet side may be greater. Therefore, be sure to conduct testing using the actual equipment.